							OF UTAH ATURAL RESOU GAS AND MINI			,	AMENDED REI	FORM 3	
		APPL	ICATION	FOR PER	MIT TO DRILL	-			1. WELL	. NAME and NUME Gushe	<b>3ER</b> r Fed 3-21-6	-20E	
2. TYPE OF		RILL NEW WELL 📵	REEN	TER P&A WEI	LL DEEP	EN WELL (	)		3. FIELD	OR WILDCAT	IDESIGNATED	)	
4. TYPE OF	WELL	Oil W	ell	Coalbed Me	thane Well: NO				5. UNIT	or COMMUNITIZA	ATION AGRE	EMENT NA	ME
6. NAME OI	F OPERATOR			OINT ENERG					7. OPER	ATOR PHONE	20 880-3621		
8. ADDRES	S OF OPERATOR				enver, CO, 8020	12			9. OPER	ATOR E-MAIL	rescentpointe		
	L LEASE NUMBER	₹	n Street, s		MINERAL OWNE				12. SUR	FACE OWNERSHI		nergy.com	
		TÚ80922		FE	DERAL D	INDIAN 🛑	) STATE	FEE		RAL INDIA		-	FEE
13. NAME (	OF SURFACE OW	NER (if box 12 = 'fe	e')						14. SUR	FACE OWNER PI	HONE (if box	12 = 'fee')	
15. ADDRE	SS OF SURFACE	OWNER (if box 12	= 'fee')						16. SUR	FACE OWNER E	-MAIL (if box	12 = 'fee')	1
	ALLOTTEE OR TI	RIBE NAME			NTEND TO COL		PRODUCTION F	ROM	19. SLA	NT			
(IT DOX 12 :	= 'INDIAN')			YE	S (Submi	it Comminç	gling Application)	) NO 📵	VERTI	CAL DIREC	TIONAL (	HORIZO	NTAL 🛑
20. LOCAT	TION OF WELL			FOOTAG	GES	Q.	TR-QTR	SECTION	т	OWNSHIP	RANGE	N	/IERIDIAN
LOCATION	N AT SURFACE		4	486 FNL 18	84 FWL		NENW	21		6.08	20.0 E		S
Top of Up	permost Produci	ng Zone		486 FNL 18	84 FWL		NENW	21		6.0 S	20.0 E		S
At Total D	Depth		4	486 FNL 18	84 FWL		NENW	21		6.0 S	20.0 E		S
21. COUNT		INTAH		22. [	DISTANCE TO N		EASE LINE (Fee		23. NUM	IBER OF ACRES	IN DRILLING	UNIT	
					DISTANCE TO Noticed For Drilling			001	26. PRO	POSED DEPTH MD: 10	000 TVD:	10000	
27. ELEVA	TION - GROUND L	EVEL		28. [	BOND NUMBER					RCE OF DRILLIN		= 4 DD: 10 4	D. 5
		5179			A		080275		WATER	RIGHTS APPROV	43-7478	F APPLICA	RLE
							Cement Inforn			-			
String	Hole Size	Casing Size		ength ) - 40	Weight 65.0		40 ST&C	Max M	ud Wt.	No Used	Sacks 0	Yield 0.0	Weight 0.0
Surf	12.25	8.625	13	- 1100	24.0		55 ST&C		.5	Class G	450	1.15	15.8
Prod	7.875	5.5	0 -	10000	17.0	N-	80 LT&C	9	.5	Hi Lift "G"	300	3.66	10.5
										Hi Lift "G"	150	2.95	11.0
										Class G	450	1.65	13.0
						ATTACH	HMENTS						
	VERIFY	THE FOLLOWI	IG ARE	ATTACHED	IN ACCORD	ANCE WI	TH THE UTAH	OIL AND G	AS CONSE	ERVATION GEN	IERAL RUL	ES	
<b>₩</b>	LL PLAT OR MAP	PREPARED BY LICE	NSED SU	RVEYOR OR	ENGINEER		<b>✓</b> COMPL	ETE DRILLING	3 PLAN				
AFF	IDAVIT OF STATU	S OF SURFACE OW	NER AGRI	EEMENT (IF	FEE SURFACE)		FORM 5.	. IF OPERATO	R IS OTHER	THAN THE LEAS	SE OWNER		
DIRI	ECTIONAL SURVE	Y PLAN (IF DIREC	TIONALLY	OR HORIZO	NTALLY DRILL	ED)	TOPOGE	RAPHICAL MA	\P				
NAME Dor	n Hamilton			TITLE Per	mitting Agent				PHONE 435	719-2018			
SIGNATUR	RE			DATE 05/	10/2013				EMAIL starp	oint@etv.net			
API NUMB	ER ASSIGNED 430	047537560000			APPROVAL	L							

Crescent Point Energy U.S. Corp Gusher Fed 3-21-6-20E NE/NW of Section 21, T6S, R20E

SHL & BHL: 486' FNL & 1884' FWL

Uintah County, Utah

#### **DRILLING PLAN**

### 1-2. Geologic Surface Formation and Estimated Tops of Important Geologic Markers

Formation	Depth - MD	
Uinta	Surface	
Garden Gulch (TGR3)	6,482	
Douglas	7,375	4100
Black Shale	7,813	
Wasatch	8,448	
TD	10,00	

3. Estimated Depths of Anticipated Water, Oil, Gas Or Minerals

Garden Gulch Formation (Oil)
Wasatch Formation (Oil)

8,448' – 8,448' 8,448' – 10,000'

Fresh water may be encountered in the Uinta Formation, but would not be expected below 350'. All usable (>10,000 PPI) TDS) water and prospectively valuable minerals (as described by BLM at onsite) encountered withing drilling will be recorded by depth and adequately protected.

All vater shows and water bearing geologic units will be reported to the geologic and engineering staff of the BLM Vernal Field Office prior to running the next string of casing or before plugging orders are requested. Usage of the State of Utah form *Report of Water Encountered* is acceptable, but not required. All water shows must be reported within one (1) business day after being encountered. Detected water flows shall be sampled, analyzed, and reported to the geologic and engineering staff at the Vernal Field Office. The BLM may request additional water samples for further analysis.

The following information is requested for water shows and samples where applicable:

Location & Sample Interval Date Sampled Flow Rate Temperature

Hardness pH

Water Classification (State of Utah)

Dissolved Iron (Fe) (ug/l)

Dissolved Magnesium (Mg) (mg/l)

Dissolved Calcium (Ca) (mg/l)

Dissolved Sodium (Na) (mg/l)

Dissolved Carbonate (CO<sub>3</sub>) (mg/l)

Dissolved Bicarbonate (NaHCO<sub>3</sub>) (mg/l) Dissolved Chloride (Cl) (mg/l) Dissolved Sulfate (SO<sub>4</sub>) (mg/l) Dissolved Total Solids (TDS) (mg/l)

Crescent Point Energy U.S. Corp | Gusher Fed 3-21-6-20E | Drilling Plan

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### 4. <u>Proposed Casing & Cementing Program</u>

#### Casing Design:

Size	In	terval	Weight	Grade	Coupling		Design Fact	ors
Size	Тор	Bottom	weight	Grade	Coupling	Burst	Collapse	Tension
Conductor								
16"	0'	40'	65	H-40	STC	1,640	670	439
Hole Size 24"								
Surface casing						2,950	1,370	244,000
8-5/8"	0'	1100'	24	J-55	STC			
Hole Size 12- 1/4"						9.59	4.45	10.52
Prod casing						7,740	6,280	348,000
5-1/2"	0'	10,000'	17	E-80	LTC			
Hole Size 7-7/8"						2.52	2.04	2.12

#### Assumptions:

- 1. Surface casing max anticipated surface pressure (MASP) = Frac gradient ray gradient
- 2. Production casing MASP (production mode) = Pore pressure gas gradient
- 3. All collapse calculations assume fully evacuated casing w/gas gradient
- 4. All tension calculations assume air weight

Frac gradient at surface casing shoe = 11.0 png.

Pore pressure at surface casing shor = 8.38 ppg

Pore pressure at prod casing shor = 8.33 ppg

Gas gradient = 0.115 psi/ft

Minimum Safety Factors
Burst = 1,900
Collapse 1.125
Tension ≠ 1.800

All casing shall be new or, if used, inspected and tested. Used casing shall meet or exceed API standards for new casing.

All casing strings shall have a minimum of 1 (one) centralizer per joint on the bottom 3 joints.

#### Cementing Design:

Job	Fill	Description	Excess	Sacks	Weight (ppg)	Yield (ft³/sk)
Surface casing	1100' - surface	Class V 2% chlorides	100%	450	15.8	1.15
Prod	4500' to	11:CH CL 1/20/ 11 :1	45% in open-	200	10.5	2.66
Lead 2	Surface	Hifill Class V 3% chlorides	hole 0% in Cased hole	300	10.5	3.66
Prod casing	6500' to 4500'	Hifill Class V 3% chlorides	25%	150	11	2.95
Lead						
Prod casing Tail	TD to 6500'	Class G 10% chlorides	15%	450	13	1.65

<sup>\*</sup>Actual volume pumped will have excess over gauge hole or caliper log if available

Waiting On Cement: A minimum of four (4) hours shall elapse prior to attempting any pressure testing of the BOP equipment which would subject the surface casing cement to pressure and a minimum of six (6) hours shall elapse before drilling out of the wiper plug, cement, on shoe. WOC time shall be recorded in the Driller's Log. Compressive strength shall be a minimum of \$200 silprior to drilling out.

The Vernal BLM office shall be notified, with sufficient lead time, in order to have a BLM representative on location while running all casing strings and cementing.

The 8-5/8" surface casing shall in all cases be cemented back to surface. In the event that during the primary surface cementing operation the cement does not circulate to surface, or if the cement level should fall back more than 8 feet from surface, then a remedial surface cementing operation shall be performed to insure adequate isolation and stabilization of the surface casing.

The production casing cementing program shall be conducted as approved to protect and/or isolate all sable water zones, potentially productive zones, lost circulation zones, abnormally pressured zones, and prospectively valuable deposits of minerals.

As a minimum, usable water zones shall be isolated and/or protected by having a cement top for the production casing at least 200 feet above the base of the usable water. If gilsonite is encountered while drilling, it shall be isolated and/or protected via the cementing program.

Top plugs shall be used to reduce contamination of cement by displacement fluid. A Tuned spacer will be used to prevent contamination of the lead cement by the drilling mud.

All casing strings below the conductor shall be pressure tested to 0.22 psi per foot of casing string length or to 1500 psi, whichever is greater, but not to exceed 70% of the minimum internal yield. If pressure declines more than 10% in 30 minutes, corrective action shall be taken.

A Form 3160-5, "Sundry Notices and Reports on Wells" shall be filed with the Vernal Field Office within 30 days after the work is completed. This report must include the following information:

Crescent Point Energy U.S. Corp | Gusher Fed 3-21-6-20E | Drilling Plan

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<sup>-</sup> Compressive strength of tail cement: 500 psi @ 7 hours

Setting of each string of casing showing the size, grade, weight of casing set, depth, amounts and type of cement used, whether cement circulated of the top of the cement behind the casing, depth of the cementing tools used, casing method and results, and the date of the work done. Spud date will be shown on the first reports submitted.

#### 5. <u>Drilling Fluids Program</u>

The Conductor section (from 0' to 40') will be drilled by Auger and final depth determined by when the black shale is encountered with a minimum depth of 40'.

The surface interval will then be drilled to  $\pm 1100'$  with air/mist system. The air rig is equipped with a 6 % blooie line that is straight run to the reserve pit. A variance is in request for this operation. The request can be found in section 12 of this plan.

From ±1100' to TD, a brine water system will be utilized. Clay inhibition and hole stability will be achieved with a polymer (DAP) additive; the reserve pit will be lined to address this additive. This brine water system will typically contain Total Dissolved Solids (TDS) of less than 3000 PPM. Anticipated mud weight is 9.5 lbs/gal. If it is necessary to control formation fluids or pressure, the system will be weighted with the addition of brine, and if pressure conditions warrant, barite and/or calcium carbonate will be used as a weighting agent. There will be enough weighting agent on location to increase the entire system to 11.0 ppg MW.

No chromate additives will be used in the mud system on Federal and on Indian lands without prior BLM approval to ensure adequate protection of fresh water aquifers

No chemicals subject to reporting under SARA Title It in a camount equal to or greater than 10,000 pounds will be used, produced, stored, transported, or disposed of annually in association with the drilling, testing, or completing of this well. Furthermore, no extremely hazardous substances, as defined in 40 CFR 355, in threshold planning quantities, will be used, produced, stored, transported, or disposed of in association with the drilling, testing, or completing of this well.

Hazardous substances specifically listed by the EPA as a hazardous waste or demonstrating characteristics of a hazardous waste will not be used in drilling, testing, or completion operations.

te nergy will visually monitor pit levels and flow from the well during drilling operations.

#### 6. Minimum Specifications for Pressure Control

A 3,000 psi BOP system or better will be used on this well. All equipment will be installed and tested per Onshore Order No. 2.

The configuration is as follows:

- Float in drillstring
- Inside BOP or safety valve
- Safety valve with same pipe threading
- Rotating Head below rotary table
- Fillup line
- 11" Annular Preventer rated to 3,000 psi minimum
- 11" bore, 4-1/2" pipe ram rated to 3,000 psi minimum
- 11" bore, Blind Ram rated to 3,000 psi minimum
- 11" bore Drilling Spool with 2 side outlets (Choke side at 3" minimum & Kill side at 2" minimum)
  - o 2 Kill line valves at 2" minimum one with a check valve

Crescent Point Energy U.S. Corp | Gusher Fed 3-21-6-20E | Drilling Plan

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- o Kill line at 2" minimum
- o 2 Choke line valves at 3" minimum
- Choke line at 3" minimum
- o 2 adjustable chokes on manifold
- o Pressure gauge on choke manifold

#### 7. BOPE Test Criteria

A Function Test of the Ram BOP equipment shall be made every trip and annular preventer every week. All required BOP tests and/or drills shall be recorded in the Driller's Report.

Chart recorders will be used for all pressure tests. Test charts, with individual test results identified, shall be maintained on location while drilling and shall be made available to BLM representatives upon request.

At a minimum, the Annular preventer will be tested to 50% of its rating for ten minutes. All other equipment (Rams, valves, manifold) will be tested at 3,000 psi for 10 minutes with a test plug. If we were to change rams for any reason post drillout we shall test the rams to 70% of surface casing internal yield.

At a minimum, the above pressure tests will be performed when such conditions exist.

- BOP's are initially installed
- Whenever a seal subject to pressure test is broken
- Following repairs to the BOPs
- Every 30 days

#### 8. <u>Accumulator</u>

The Accumulator will have sufficient capacity to open the hydraulically-controlled choke line valve (HCR), close both rams and annular preventer as well maintain 200 psi above nitrogen precharge of the accumulator without use of accumulator pumps. The fluid reservoir volume will be double the usable volume of the accumulator system. The fluid level will be maintained per manufacturer's specifications.

The BOP system will have 2 independent power sources to close both rams and annular preventer, while opening HCR. Witrogen bottles will be 1 source and electric and/or air powered pumps will be the other.

The accumulator precharge will be conducted every 6 months and maintained to be within the specifications of Onshore Order No. 2

A manual locking device or automatic locking device will be installed on both ram preventers and annular preventer.

Remote controls will be readily accessible to the driller and be capable of closing all preventers. Main controls will be available to allow full functioning of all preventers and HCR.

## 9. <u>Testing, Logging and Coring Programs</u>

The logging program will consist of a Gamma Ray log from TD to base of surface casing @+/-1100'. A cement bond log will be run from PBTD to Top of cement. No drill stem testing or coring is planned for this well.

Crescent Point Energy U.S. Corp | Gusher Fed 3-21-6-20E | Drilling Plan

40.0

#### 10. Anticipated Abnormal Pressures or Temperature

No abnormal temperatures or pressures are anticipated. No hydrogen sulfide has been encountered or is known to exist from previous wells drilled to similar depths in this area.

Maximum anticipated bottomhole pressure will be approximately equal to total depth in feet multiplied by a 0.52 psi/ft gradient, and a maximum anticipated surface pressure will be approximately equal to the bottomhole pressure calculated minus the pressure of a partially evacuated hole calculated at a 0.22 psi/foot gradient.

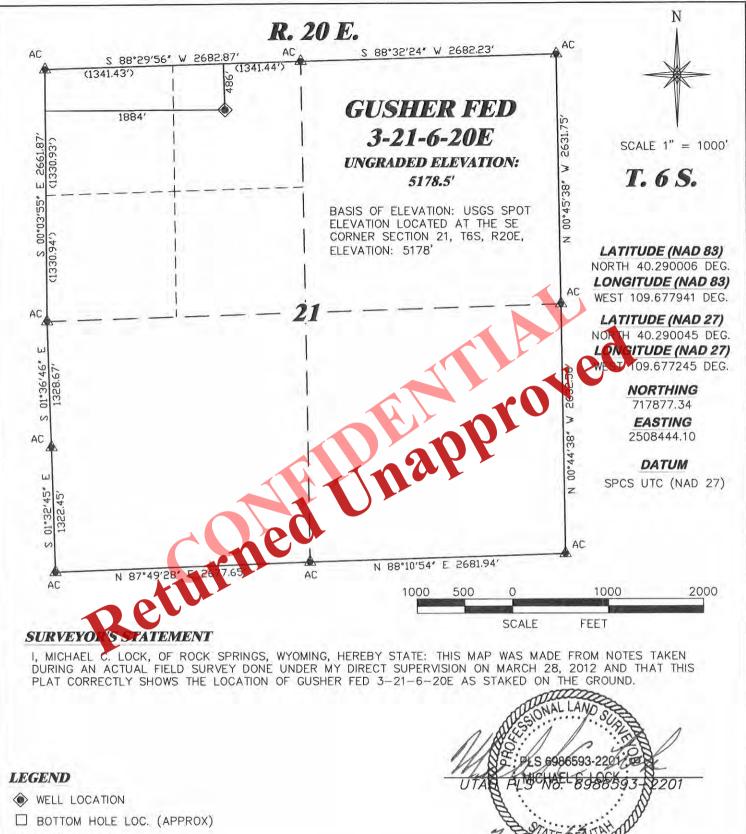
#### 11. <u>Anticipated Starting Date and Duration of Operations</u>

It is anticipated that drilling operations will commence as soon as possible after approval is given and take approximately seven (7) days from spud to rig release and two weeks for completions.

#### 12. Variances Requested from Onshore Order No. 2

- 1. A diverter is utilized for surface air drilling, rather than a lubricated rotating her
- 2. The blooie line is 45 ft from the wellbore rather than 100' and is not anchor end of
- 3. The blooie line is not equipped with an automatic igniter or continuous pilot light.
- 4. The compressor is located on the rig itself and not 100 ft from the well ore.
- 5. The requirement for an Formation Integrity Test (FIT) or a Le





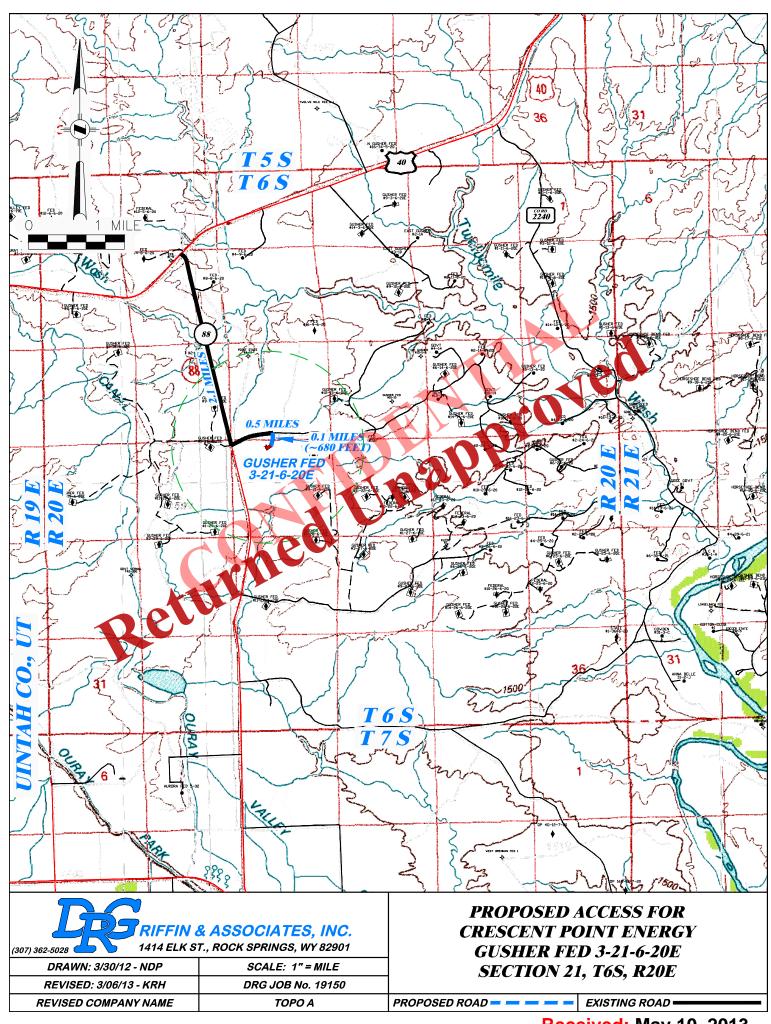
- FOUND MONUMENT
- A PREVIOUSLY FOUND MONUMENT

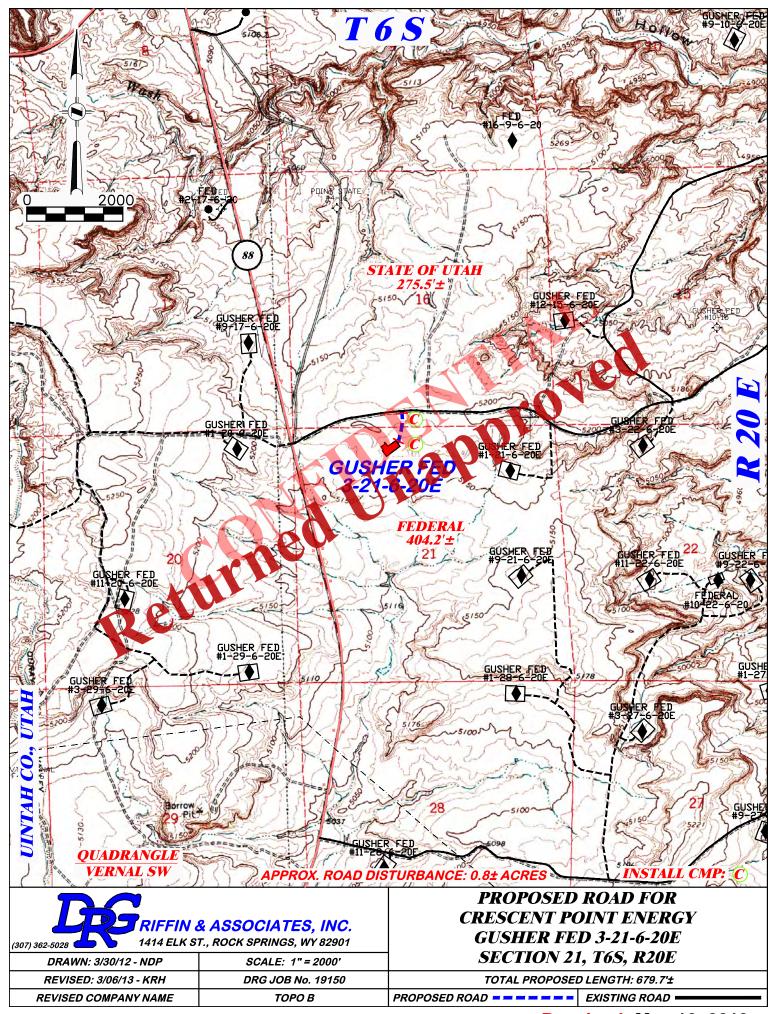
7	
	TRIFFIN & ASSOCIATES, INC.
(307) 362-5028	1414 ELK ST., ROCK SPRINGS, WY 82901

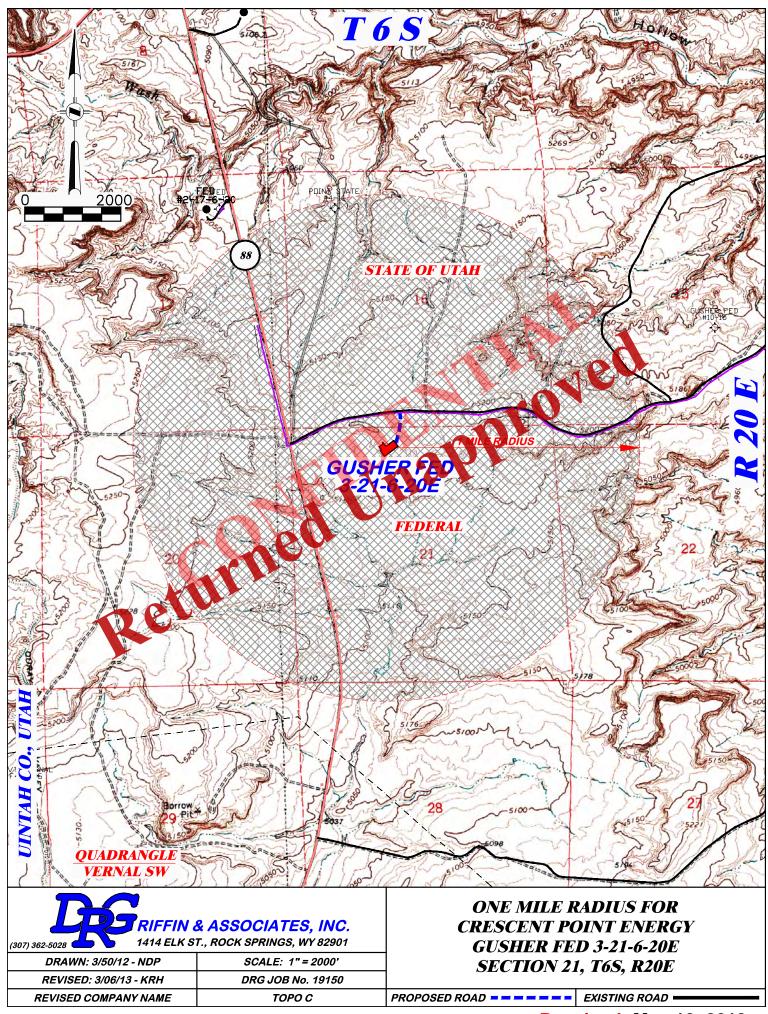
DRAWN: 3/30/12 - NDP	SCALE: 1" = 1000'		
REVISED: 3/06/13 - KRH	DRG JOB No. 19150		
REVISED COMPANY NAME	EXHIBIT 1		

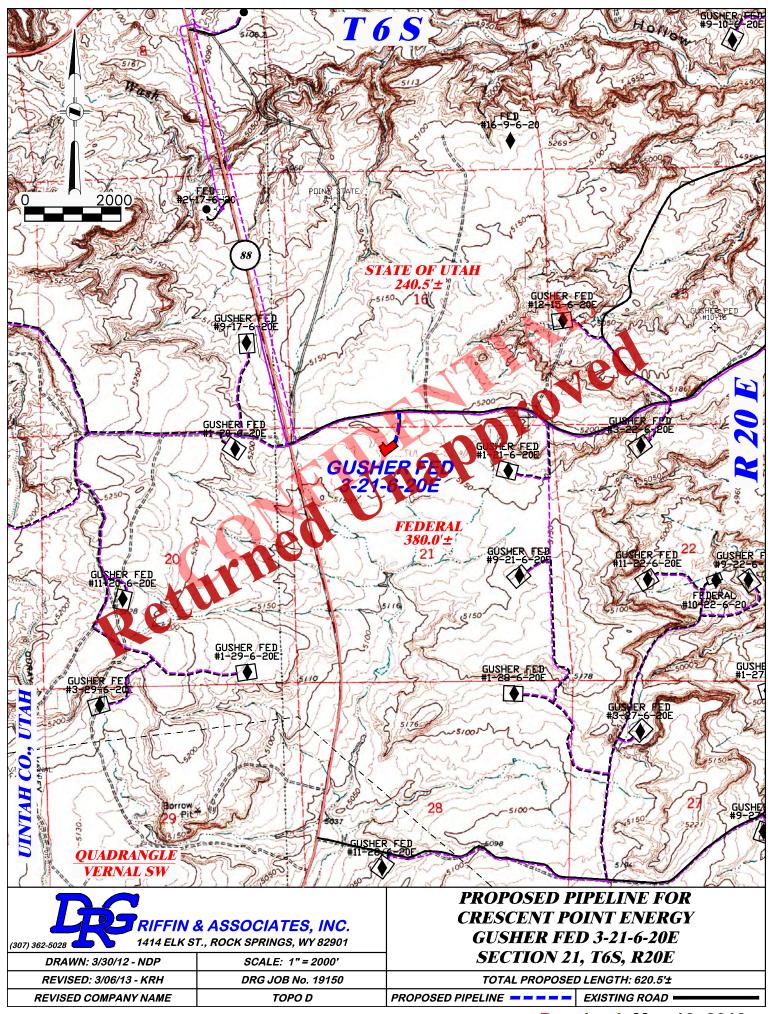
## PLAT OF DRILLING LOCATION FOR CRESCENT POINT ENERGY

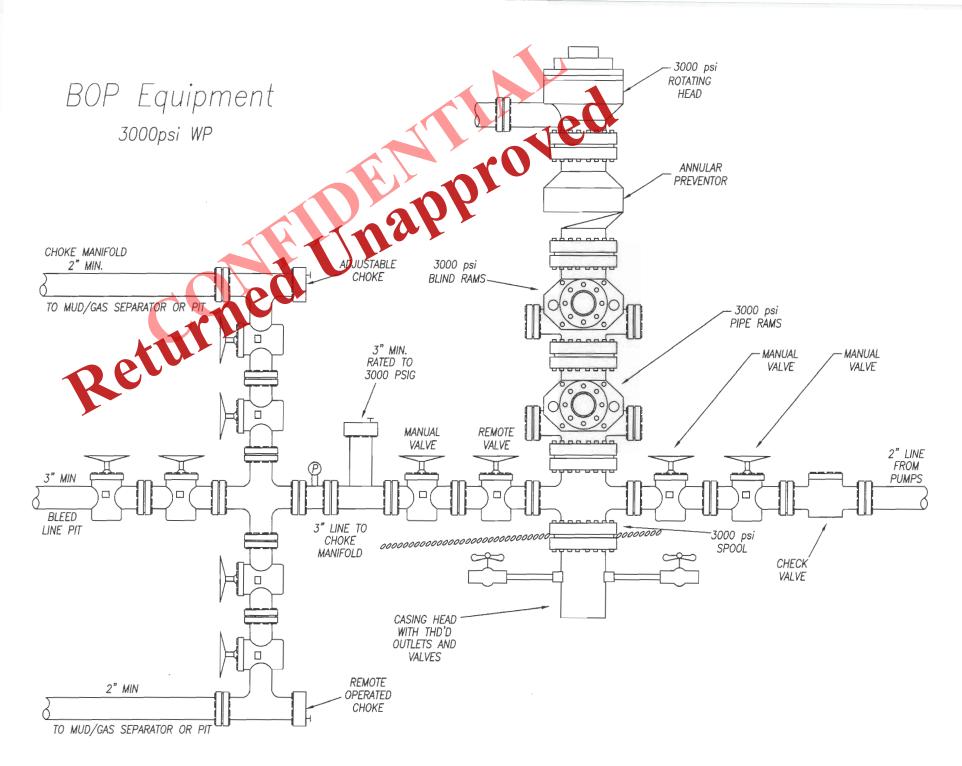
486' F/NL & 1884' F/WL, NENW, SECTION 21, T. 6 S., R. 20 E., S.L.M UINTAH COUNTY, UTAH

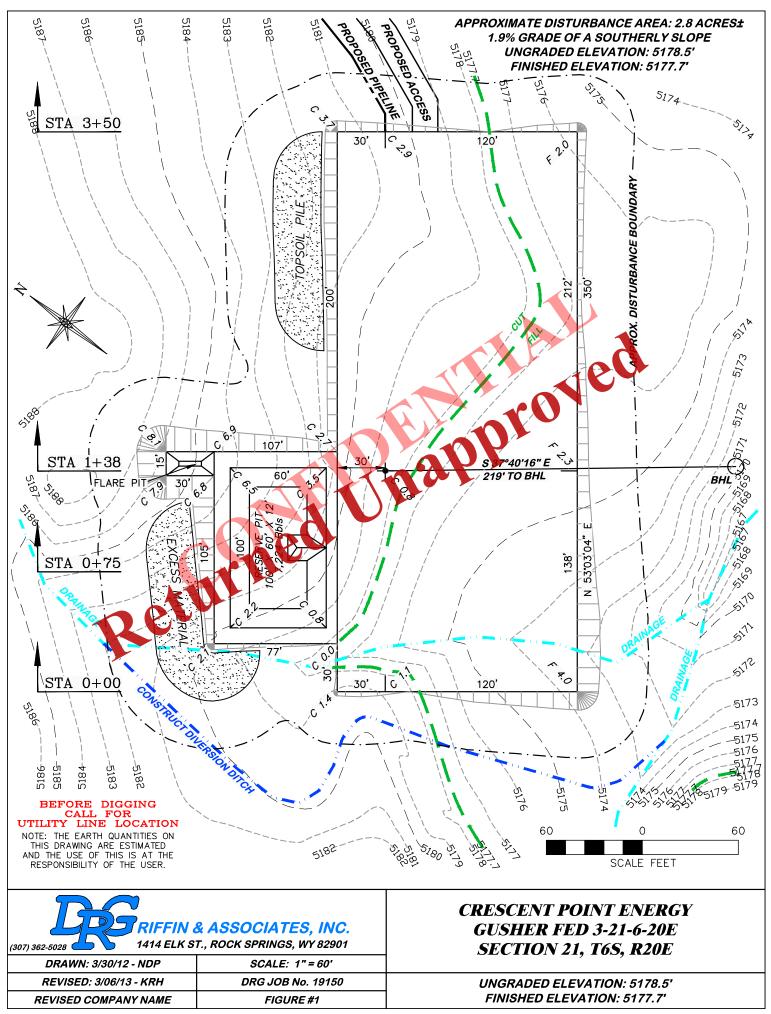


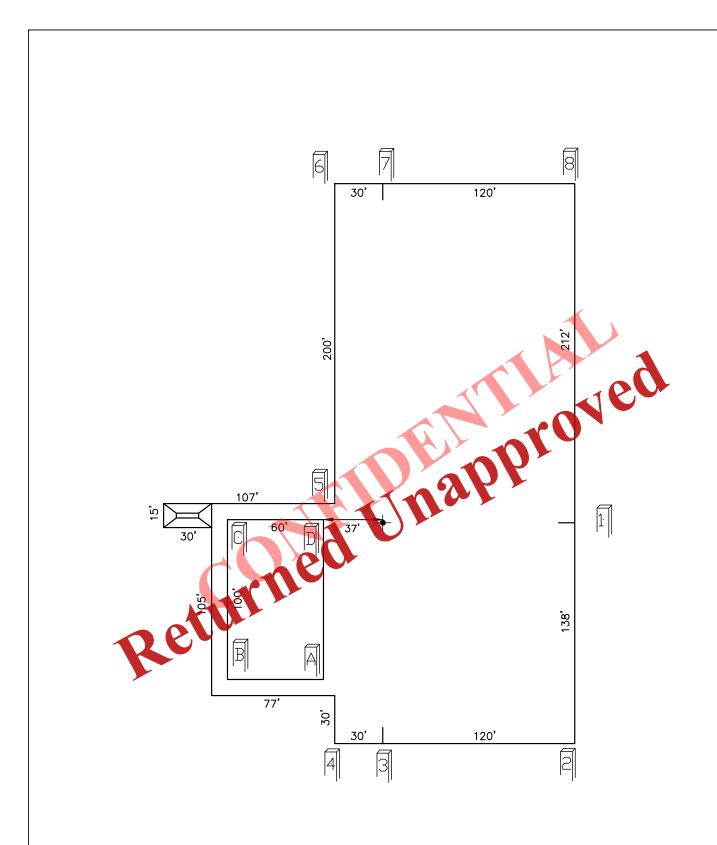














 DRAWN: 3/30/12 - NDP
 SCALE: 1" = 60'

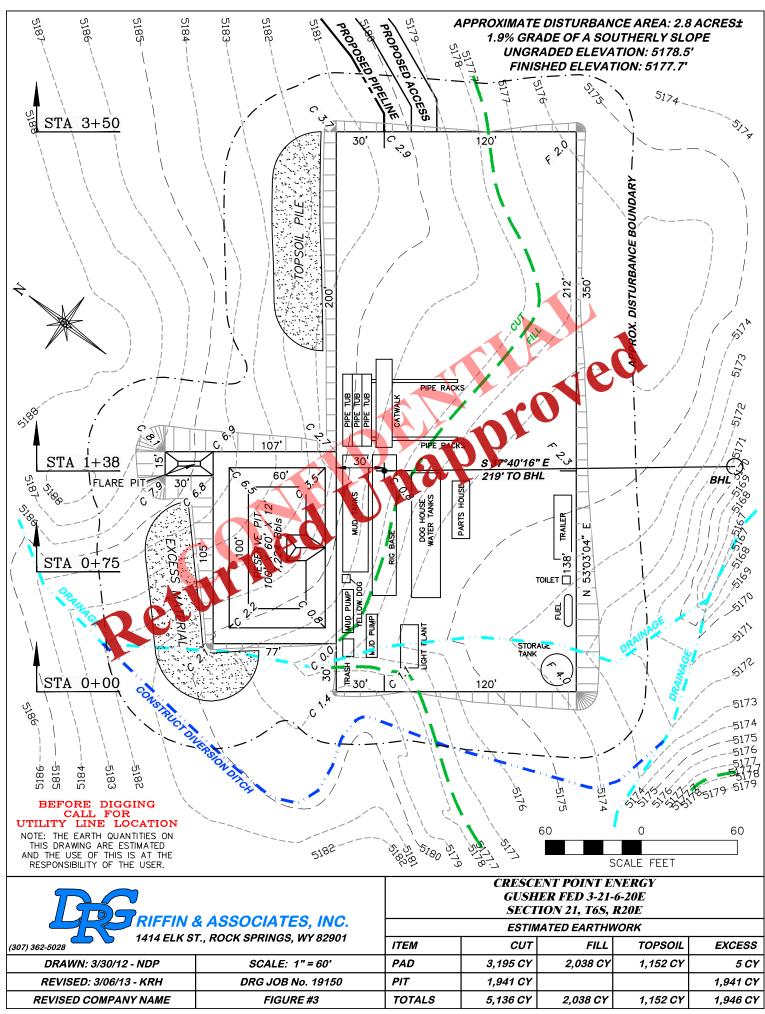
 REVISED: 3/06/13 - KRH
 DRG JOB No. 19150

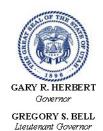
 REVISED COMPANY NAME
 FIGURE #1A

## PAD LAYOUT CRESCENT POINT ENERGY GUSHER FED 3-21-6-20E SECTION 21, T6S, R20E

UNGRADED ELEVATION: 5178.5' FINISHED ELEVATION: 5177.7'







# State of Utah

#### DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER

Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

May 14, 2013

CRESCENT POINT ENERGY U.S. CORP 555 17th Street, Suite 750 Denver, CO 80202

Re: Application for Permit to Drill - UINTAH County, Utah

Ladies and Gentlemen:

The Application for Permit to Drill (APD) for the Gusher Fed 3-21-6-20E well, API 43047537560000 that was submitted May 10, 2013 is being returned unapproved. If you plan on drilling this well in the future, you must first submit a new application.

Should you have any questions regarding this matter, please call me at (801) 538-5312.

Sincerely,

Diana Mason Environmental Scientist

Enclosure

cc: Bureau of Land Management, Vernal, Utah

